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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/556,852 04/21/00 LIEDER

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EXAMINER

MEDLEY, M

ART UNIT	PAPER NUMBER
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1714

DATE MAILED:

04/11/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/556,852

Applicant(s)

LIEDER et al.

Examiner

MEDLEY

Group Art Unit

1714

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☐ Responsive to communication(s) filed on _____.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-29 is/are pending in the application.
- ☐ Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-29 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____.
 - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 5
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☒ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

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DETAILED ACTION

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-29 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1, 10 and 18 (and their dependent claims) fail to set forth description for the gasoline-oxygenated other the alcohol relative proportion and Dry Vapor Pressure Equivalent. The claims fail to set forth the description that there is a blend of hydrocarbon streams and the stream composition. Claims 23 and 26 (and their dependent claims) fail to set forth the description for each of the hydrocarbon streams and the step for adding an alcohol.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 23-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claims 23 and 26 are indefinite for failing to provide a step for the gasoline-oxygenate blend providing for the inclusion of an oxygenate. Claims 24 and 28 are indefinite and confusing in that it is unclear if the ethanol is the oxygenate component or an additional component. Clarification is requested. Claims 25 and 29 are indefinite and confusing in that it is unclear that there in any (MTBE) methyl t-butyl ether is present in independent claims 23 and 26.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 10-17 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Orr 6,039,772, note column 14, line 50 to column 17, lines 1-17 and claims 1,2,7.

Claims 1-4, 7-13 and 16-17 are rejected under 35 U.S.C. 102(b) as being clearly by Redacted Gasoline Data from Third Party Source, note page 1 for Example 2; and Gasoline Data from a Third Party, note page 1/15 for Example 1.

Claims 5-6 and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Redacted Gasoline Data from Third Party Source, note page 1 for Example 2; and Gasoline Data from a Third Party, note page 1/15 for Example 1. The prior art sources are silent to the claimed toxic air pollutants emissions and the percentage of oxygen present in the fuel blend of Applicants. It is the Examiner's position that the gasoline-oxygenated blend of the prior art sources inherently have present therein greater than about 1.8% oxygen and a reduction of greater than about 21.5%

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of toxic air pollutants emissions because their gasoline-oxygenated blend have the same RVP and alcohol and present in the same relative percentage.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malfer et al 6,048,373 combined with Jessup et al 5,288,393.

Malfer et al teach and disclose any base fuel suitable for use in operation of spark-ignition internal combustion engine (ICE) containing both hydrocarbon of the gasoline boiling range and fuel-soluble oxygenated blending agents including C1-C4 aliphatic alcohols, e.g. ethanol, and ethers wherein the oxygenates will normally be present in the base fuel in amount below-25% by volume, note column 5, lines 18-35.

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Applicants instant claims differs from those of Malfer et al in that applicants are specific to Reid Vapor Pressures, RVP, of less than 7.2 PSI, less than 7.1 PSI and less than 7.0. PSI, 50% distillation point of less than about 178⁰F, less than about 195⁰F, and less than 250⁰F; land 10% distillation point of less than 123⁰F, less than 158⁰F and less than 126⁰F wherein Malfer et al is silent to set physical properties.

It is the Examiner position that the use of gasoline having 50% distillation point of less than 178⁰F, 195⁰F and 250⁰F; 10% distillation point of less than 123⁰F, 158⁰F and 126⁰F respectively; and RVP of less than 7.2 PSI, 7.1 PSI and 7.0 PSI respectively would be obvious with the combined teaching of Jessup et al. Patentees Jessup et al teach and disclose a process for blending at two hydrocarbon fuels to produce gasoline. The said gasoline comprises 50% distillation point of less than 178⁰, 195⁰ F and 250⁰F; 10% distillation point of less than 123⁰F, 158⁰F and 126⁰F, respectively; and RVP of less than 7.2 PSI, 7.1 PSI and 7.0 PSI, respectively, note Table 2 of columns 7-8 for Blend AR 3951-15 for 10% and 50% distillation point of 158⁰F and 207⁰F, respectively, and RVP 6.25 psi and Blend ULRG for 10% and 50% distillation point of 160⁰F and 218⁰F, respectively, and RVP of 5.35; and Table 3 of columns 9-10 for Examples 15 and 16 for the emissions results; Table 5 of columns 11-12 for Blends D with 10% and 50% distillation point of 147⁰F and 236⁰F, and RVP of 6.63; E with 10% and 50% distillation point of 160⁰F and 219⁰F , respectively, and RVP of 6.46; and P with 10% and 50% distillation point of 144⁰F and 204⁰F, respectively, and RVP of 7.07. Jessup et al further teach and disclose 8 physical and/or chemical factors for controlling the CO, NO_x and hydrocarbons emissions of gasolines with

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the 50% distillation point being the principal factor for influencing the reduction minimization of hydrocarbon and/or CO emissions, note column 1, line 41-to column 2, line 1-50.

It would be obvious to one of ordinary skill in the art to use or combine gasolines having the 10% distillation point, the 50% distillation point and the RVP of Jessup et al with the gasoline oxygenate of Malfer et al because combining two or more materials disclosed by the prior art for the same purpose to form a third material that is to be used for the same purpose has been held to be a prima facie case of obviousness, See *In re Kerkhoven*, 205 USPQ 1069.

Claims 1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niebylski 4,317,657 in view of Cunningham et al 5,551,957, and 5,679,116.

Niebylski teaches and discloses liquid hydrocarbons blend of for gasolines having anti-knock greater than 89 and provide for the inclusion of further blending agents or supplements such as methanol, isopropanol, t-butanol, note column 2, lines 3 to column 4, lines 1-2, and Example 1, lines 45-54.

Applicants claims differ from the claims of Niebylski in that applicants claims are specific to ethanol, to RVP of less than 7, 7.1 and 7.2 PSI and 50% distillation point of less than 195°F, 178°F and 250°F and 10% distillation point of less than 126°F, 123°F, and 158°F. It is the Examiner position that the 10% distillation point, the 50% distillation point, the ethanol, and RVP of Applicants would be obvious in view of Cunningham et al.


Cunningham et al, '116 teach and disclose a conventional gasoline having 10% distillation of 124°F, 50% distillation of 217°F and a PSI of 7.4, note Tables I and II of column 16; and note

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Table V of column 17 for the gasoline having a 10% and 50% distillation of 50°F of 104°F, respectively, and a RV P of 9.14. Patentees also provide for its fuel to be an oxygenated fuel, a fuel blended with others, alcohols and/or other oxygen containing fuel blending components as are used in reformulated gasoline, note column 21, lines 15-22. Cunningham et al '957 teach and disclose the same subject matter, note Tables 1 and 2 and column 15, lines 33-46. It would be obvious to one of ordinary skill in the art to use the secondary references fuels containing the 10% and 50% distillation point, the RV P and ethanol as the alcohol and fuel of Niebylski with the reasonable expectation that the fuel will reduce toxic emissions because the oxygenates replaces a portion of the hydrocarbons which produces toxic emissions.

The prior art cited but not applied further teach fuel-oxygenates of the same nature as claimed by Applicants.

Any inquiry concerning this communication should be directed to Margaret B. Medley at telephone number (703) 308-2518.


MARGARET MEDLEY
PRIMARY EXAMINER

Medley/af

April 3, 2001